

Decrypting Load Balancing Array System

ABSTRACT

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A decrypting load balancing array system uses a Pentaflow approach to network traffic management that extends across an array of Decrypting Load Balancing Array (DLBA) servers sitting in front of back end Web servers. One of the DLBA servers acts as a scheduler for the array through which all incoming requests are routed. The scheduler routes and load balances the traffic to the other DLBA servers (including itself) in the array. Each DLBA server routes and load balances the incoming request packets to the appropriate back end Web servers. Responses to the requests from the back end Web servers are sent back to the DLBA server which forwards the response directly to the requesting client. SSL packets are decrypted in the DLBA server before being routed to a back end Web server, allowing the DLBA server to schedule SSL sessions to back end Web servers based on a cookie or session ID. Response packets are encrypted by the DLBA server before being forwarded to the client. The invention also uses cookie injection to map a client to a specific back end Web server. In addition, any DLBA server in the array is capable of taking over the scheduler functionality in case of scheduler failure. URL based scheduling and hash scheduling of request packets with keepalive connections is easily performed due to the invention's architecture.